

Serial No. 10/721,179
Amtd. Dated November 16, 2004
Reply to Office Action of August 18, 2004

Docket No. K-0586

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A dryer, comprising:
 - a cabinet;
 - a drum provided in the cabinet and configured to be in rotational communication with a motor;
 - ~~a motor~~; and
 - a heater assembly coupled to the drum, comprising:
 - a heater case having an air passage ~~inside~~ formed therein;
 - a plate partitioning configured to partition the air passage into an upper passage and a lower passage; and
 - independent first and second coil arrays independently provided ~~to~~ in the air passage and each configured to alternately cross the plate between the upper and lower passages.

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2. (Currently Amended) The dryer as claimed in claim 1, wherein a plurality of first coils of the first coil array leaves ~~are positioned at~~ a predetermined distance from a corresponding plurality of second coils of the second coil array.

3. (Currently Amended) The dryer as claimed in claim 1, wherein the first coil array is symmetrical to the second coil array ~~centering on the plate along a predetermined line of symmetry of the air passage.~~

4. (Currently Amended) The dryer as claimed in claim 1, wherein each of the first and second coil arrays is electrically connected ~~in one body as a single unit.~~

5. (Currently Amended) The dryer as claimed in claim 1, wherein the first and second coil arrays each comprise a plurality of coils ~~are provided to top at upper and bottom points lower portions of the first and second coil arrays, respectively each coil array.~~

6. (Currently Amended) The dryer as claimed in claim 5, wherein the ~~top upper and bottom points lower portions~~ lie on centerlines of the upper and lower passages, respectively.

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7. (Currently Amended) The dryer as claimed in claim 5, wherein the plurality of coils provided to of the first coil array leave are positioned at a predetermined interval along a flowing an air flow direction of air from the other corresponding plurality of coils provided to of the second coil array, respectively.

8. (Currently Amended) The dryer as claimed in claim 1, wherein the first and second coil arrays are configured to alternately zigzagged to cross the plate so as to each form a zigzag pattern.

9. (Currently Amended) The dryer as claimed in claim 1, wherein the first and second coil arrays are configured to be separately controlled.

10. (Currently Amended) A heater assembly ef for a dryer, comprising:
a heater case having an air passage inside formed therein;
a plate partitioning configured to partition the air passage into an upper passage and a lower passage; and
independent first and second coil arrays independently provided to in the air passage and configured to alternately cross the plate between the upper and lower passages.

11. (Currently Amended) The heater assembly as claimed in claim 10, wherein a plurality of first coils of the first coil array leaves ~~are positioned at~~ a predetermined distance from a corresponding plurality of second coils of the second coil array.

12. (Currently Amended) The heater assembly as claimed in claim 10, wherein the first coil array is symmetrical to the second coil array ~~centering on the plate along a predetermined line of symmetry of the air passage~~.

13. (Currently Amended) The heater assembly as claimed in claim 10, wherein each of the first and second coil arrays is electrically connected ~~in one body as a single unit~~.

14. (Currently Amended) The heater assembly as claimed in claim 10, wherein the first and second coil arrays each comprise a plurality of coils ~~are provided to top and bottom points of the first and second coil arrays, respectively at upper and lower portions of each coil array~~.

15. (Currently Amended) The heater assembly as claimed in claim 14, wherein ~~the top and bottom points upper and lower portions of each coil array lie on centerlines of the upper and lower passages, respectively.~~

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16. (Currently Amended) The heater assembly as claimed in claim 14, wherein the plurality of coils ~~provided to of~~ the first coil array ~~leave are positioned at~~ a predetermined interval ~~along a flowing in an airflow direction of air from the other corresponding plurality of~~ coils ~~provided to of~~ the second coil array, respectively.

17. (Currently Amended) The heater assembly as claimed in claim 10, wherein the first and second coil arrays are configured to alternately zigzag to cross the plate so as to form a zigzag pattern.

18. (Currently Amended) The heater assembly as claimed in claim 10, wherein the first and second coil arrays are configured to be separately controlled.

19. (New) The dryer as claimed in claim 1, wherein the first and second coil arrays are configured to alternately cross the plate between the upper and lower passages.

20. (New) The dryer as claimed in claim 3, wherein the plate is positioned along the predetermined line of symmetry of the air passage.

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21. (New) The heater assembly as claimed in claim 12, wherein the plate is positioned along the predetermined line of symmetry of the air passage.

22. (New) The heater assembly as claimed in claim 10, wherein the first and second coil arrays are configured to alternately cross the plate between the upper and lower passages

23. (New) A dryer comprising the heater assembly of claim 10.

24. (New) A heater assembly for a dryer, comprising:

a heater case;

a plate provided in the case and configured to partition the case into an upper portion and a lower portion;

a first coil array comprising a plurality of first coils, the plurality of first coils comprising a plurality of upper first coils positioned in the upper portion of the case, and a plurality of lower first coils positioned in the lower portion of the case; and

a second coil array comprising a plurality of second coils, the plurality of second coils comprising a plurality of upper second coils positioned in the upper portion of the case, and a plurality of lower second coils positioned in the lower portion of the case.

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25. (New) The heater assembly as claimed in claim 24, wherein the first coil array is configured to operate as a single unit, and wherein the plurality of first coils are arranged in the first coil array such that the upper and lower first coils form an alternating pattern.

26. (New) The heater assembly as claimed in claim 25, wherein the first coil array is configured to cross the plate as the first coil array alternates between the upper and lower first coils.

27. (New) The heater assembly as claimed in claim 26, wherein the second coil array is configured to operate as a single unit independent of the first coil array, and wherein the plurality of second coils are arranged in the second coil array such that the upper and lower second coils form an alternating pattern.

28. (New) The heater assembly as claimed in claim 27, wherein the alternating pattern formed by the upper and lower first coils is a mirror image of the alternating pattern formed by the upper and lower second coils.

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29. (New) The heater assembly as claimed in claim 27, wherein the second coil array is configured to cross the plate as the second coil array alternates between the upper and lower second coils.

30. (New) The heater assembly as claimed in claim 24, wherein the first coil array is symmetrical to the second coil array about the plate.

31. (New) The heater assembly as claimed in claim 24, wherein the first and second coil arrays each form a zigzag pattern.

32. (New) A dryer comprising the heater of claim 24.